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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/207,546	12/08/98	DEGENDT S	98-162-B

020306 IM22/0322
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EXAMINER	
AHMED, S	
ART UNIT	**PAPER NUMBER**
1746	20

DATE MAILED: 03/22/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary	Application No. 09/207,546	Applicant(s) DeGendt et al
	Examiner Shamim Ahmed	Group Art Unit 1746

☒ Responsive to communication(s) filed on *Jan 31, 2001* .

☒ This action is **FINAL.**

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire *3* month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) *27-33 and 35* is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) *27-33 and 35* is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐approved ☐disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) _____ .

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____ .

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☐ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

DETAILED ACTION

Response to Amendment

1. The claim objection and 35 U.S.C 112, first paragraph rejection of the last Office action is withdrawn. Claims 27-33 and 35 are still rejected under 35 U.S.C. 103(a). Claim 27 is provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claim 49 of the co-pending application serial No. 09/022,834. Claims 27-28 are provisionally rejected under obviousness-double patenting as being unpatentable over claims 27 or 60 and 28 respectively, of the co-pending application serial No. 09/207,546 as discussed in the paragraph eleven, thirteen and fourteen of the previous Office Action, mailed 8/30/2000.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 27-28, 33, 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sakon et al (USP 5,560,857) in view of kern (Hand book of Semiconductor Wafer Cleaning Technology) and further in view of Sehested et al (J Phys. Chem.).

The rejection is repeated herein as the paragraph Nos. 7, 8 and 9 of the previous Office Action, mailed 8/30/2000.

Double Patenting

4. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

5. Claim 27 is provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claim 49 of copending Application No. 09/022,834. This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

6. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321© may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

7. Claim 27 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 60 of copending Application No. 09/022,834. Although the conflicting claims are not identical, they are not patentably distinct from each other

because claim 27 of the instant case differs from the claim 60 of the copending Application No. 09/022,834 is that of the concentration of the additive in the fluid is not limited. It appears claim 60 broadly claims any concentration of the additive and hence embraces the claimed limitation.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

8. Claims 27-28 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 27-28 of copending Application No. 09/002,834. Although the conflicting claims are not identical, they are not patentably distinct from each other because it would have been obvious to use fluid as a liquid.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Response to Arguments

9. Applicant's arguments filed 1/31/01 have been fully considered but they are not persuasive. Applicants argue that cleaning solutions of Sakon for cleaning silicon substrate are different from the inventive cleaning solutions for organic material removal. Applicants also argue that the use of acetic acid in Sakon's reference is for an entirely different purpose, not for the use as a scavenger. In response, examiner states that the prior art's teaching does not have to be the same as the applicant's benefit, as long as the acetic acid provides some advantages in the cleaning composition. It would provide the same benefit as applicants claimed because the modified Sakon's cleaning solutions have all the constituents as the claimed invention and would remove

the organic contaminants from the surface, while it removes the metallic contaminants and the adhered particles from the surface.

Examiner also states that Sakon added acetic acid in the cleaning solution and the acetic acid acts as a well known stabilizer of aqueous ozone as taught by Sehested et al. So, it would have been obvious that the acetic acid acts as OH radical scavenger in the modified Sakon's cleaning composition because it is a well known stabilizer of aqueous ozone.

Applicants, further argue that neither Heyns nor Sakon reference suggest the use of an additive as a scavenger in combination with ozone. In response, examiner states that Heyns teaches a method of removing organic contaminants using ozone-injected water or an hydrogen peroxide based solution (see paragraph 8 of the Heyns's reference) but fails to teach the use of acetic acid as an additive. However, Sakon et al teach that acetic acid is added as an additive which will acts as a scavenger, as discussed above. So, modified Heyns teaches the claimed invention.

Conclusion

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shamim Ahmed whose telephone number is (703) 305-1929.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski, can be reached on (703) 308-4333. The fax phone number for this Group is (703) 305-7719.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0661.

SA

March 20, 2001

RANDY GULAKOWSKI
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700